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ABSTRACT OF THE DISCLOSURE

A method and system for automated temperature measurement is described. The system includes a programmable logic controller, a temperature measurement diode, an analog-to-digital converter coupled to the diode and the programmable logic controller, a current source coupled to the diode and configured to generate a first current and a
10 second current different from said first current, and a processor coupled to the current source and to the analog-to-digital converter. The processor controls the current source such that the current source sequentially applies the first current to the diode at a first point in time and applies the second current to the diode at a second point in time. The processor also receives a first voltage across the diode measured when the first current is
15 applied to the diode and a second voltage across the diode measured when the second current is applied to the diode. Based on the first and second voltages, the processor determines the temperature proximate the diode.